

45. The method of claim 38 wherein said multimedia information is analog audio.
46. The method of claim 38 wherein said multimedia information is digital audio.
47. The method of claim 38 wherein said multimedia information is analog video.
48. The method of claim 38 wherein said multimedia information is digital video.
49. The method of claim 38 wherein said multimedia information is analog data.
50. The method of claim 38 wherein said multimedia information is digital data.

II. REMARKS

A. Introduction

The Office Action dated February 18, 1998 (Office Action) has been carefully reviewed and the foregoing amendments made in response thereto.

Claims 1-9, 12-21, 24-30, 32-34, 38-42 and 44 are amended. Claims 1-50 are pending in the application.

Claims 1-50 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to

reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Claims 1-50 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Claims 1, 2, 4, 5, 17 and 24 are rejected under 35 U.S.C. § 102 (b) as being anticipated by, Huang, U.S. Patent No. 4,472,801.

Claims 1, 4, 5 and 8 are rejected under 35 U.S.C. § 102 (b) as being anticipated by, Sanders, Jr. et al., U.S. Patent No. 4,135,156.

Claim 12 is rejected under 35 U.S.C. § 103 (a) as being unpatentable over Cox et al., U.S. Patent No. 4,388,645 in view of Robertson et al., U.S. Patent No. 4,052,737.

Applicants note that independent claims 33 and 38 and dependent claims 3, 6-7, 9-11, 13-16, 18-23, 25-32, 34-37, and 39-50 are not rejected as being unpatentable over any prior art of record. Applicants assume that the claims are allowable but for the rejections under 35 U.S.C. § 112.

The draftsperson's objections to the drawings is noted. Any discrepancies will be corrected upon notice of allowance.

Claims 1-50 remain active in this application. No new matter is presented in the foregoing amendments. Approval and entry of same is respectfully requested.

B. Continuity

The Office Action suggests that "the present application is not a true copy of parent application S.N. 08/113,329 from which the present application claims to be a "continuation". For example, at least the original claims of the present application are different from the original claims of said parent application." Applicants respectfully contend that the present application adds no new matter to the parent application and is therefore, not a continuation-in-part application as suggested.

The Office Action further suggests that the oath or declaration is defective because it "does not state that the person making the oath or declaration in a continuation-in-part application...discloses and claims subject matter in addition to that disclosed in the prior copending applications..." (See Office Action, paragraph 3). Applicants respectfully contend, as above, that the present application adds no new matter to the parent application and is therefore, not a continuation-in-part application as suggested. For that reason, a new oath or declaration is not required as suggested.

Applicants claim priority under 35 U.S.C. § 120 of the following applications:

<u>Serial No.</u>	<u>Filing Date</u>	<u>Patent No.</u>
08/113,329	August 30, 1993	Pending
08/056,501	May 3, 1993	5,335,277
07/849,226	March 10, 1992	5,233,654
07/588,126	September 25, 1990	5,109,414
07/096,096	September 11, 1987	4,965,825
06/829,531	February 14, 1986	4,704,725
06/317,510	November 3, 1981	4,694,490

C. Response to Requirement Imposed Upon Applicants to Resolve Alleged Conflicts Between Applicants' Applications.

Applicants respectfully traverse the requirements of the Office Action paragraph 6.

Paragraph 6 of the Office Action requires Applicants to either:

- (1) file terminal disclaimers in each of the related 328 applications terminally disclaiming each of the other 327 applications; or
- (2) provide an affidavit attesting to the fact that all claims in the 328 applications have been reviewed by applicant and that no conflicting claims exist between the applications; or
- (3) resolve all conflicts between claims in the related 328 applications by identifying how all the claims in the instant application are distinct and separate inventions from all the claims in the above identified 328 applications.

In addition, Examiner states that failure to comply with any one of these requirements will result in abandonment of the application.

Examiner states that the requirement has been made because conflicts exist between claims of the related co-pending applications, including the present application. Examiner sets forth only the serial numbers of the co-pending applications without an indication of which claims are conflicting. Examiner has also attached an Appendix providing what is deemed to be clear evidence that conflicting claims exist between the 328 related co-pending applications and the present application. Further, Examiner states that an analysis of all claims in the 328 related co-pending applications would be an extreme burden on the Office requiring millions of claim comparisons.

Applicants respectfully traverse these requirements in that Examiner has both improperly imposed the requirements, and has incorrectly indicated that abandonment will occur upon failure to comply with the requirement. Applicants' traversal is supported by the fact that 37 C.F.R. § 1.78 (b) does not, under the present circumstances, provide Examiner with authority to require Applicants to either: 1) file terminal disclaimers; 2) file an affidavit; or 3) resolve all apparent conflicts. Additionally, the penalty of abandonment of the instant application for failure to comply with the aforementioned requirement is improper for being outside the legitimate authority to impose abandonment upon an application. The following remarks in Section (B) will explain Applicants' basis for this traversal.

1. The PTO's New Requirement is an Unlawfully Promulgated Substantive Rule Outside the Commissioner's Statutory Grant of Power

The PTO Commissioner obtains his statutory rulemaking authority from the Congress through the provisions of Title 35 of the United States Code. The broadest grant of rulemaking authority -- 35 U.S.C. § 6 (a) -- permits the Commissioner to promulgate regulations directed only to "the conduct of proceedings in the [PTO]".

This provision does NOT grant the Commissioner authority to issue substantive rules of patent law. Animal Legal Defense Fund v. Quigg, 932 F.2d 920, 930, 18 USPQ2d 1677, 1686 (Fed. Cir. 1991).¹ Applicants respectfully submit that the Examiner's creation of a new set of requirements based upon 37 CFR § 1.78(b) constitutes an unlawful promulgation of a substantive rule in direct contradiction of a long-established statutory and regulatory scheme.

2. The PTO's Requirement is a Substantive Rule

The first determination is whether the requirement as imposed by the PTO upon Applicants is substantive or a procedural rule. The Administrative Procedure Act offers general guidelines under which all administrative agencies must operate. A fundamental premise of administrative law is that administrative agencies must act solely within their statutory grant of power. *Chevron v. Natural Resources Defense Council*, 467 U.S. 837 (1984). The PTO Commissioner has NOT been granted power to promulgate substantive rules of patent law. *Merck & Co., Inc. v. Kessler*, 80 F.3d 1543 (Fed. Cir. 1996), citing, *Animal Legal Defense Fund v. Quigg*, 932 F.2d 920, 930, 18 USPQ2d 1677, 1686 (Fed. Cir. 1991).

The appropriate test for such a determination is an assessment of the rule's impact on the Applicants' rights and interests under the patent laws. *Fressola v. Manbeck*, 36 USPQ2d 1211, 1215 (D.D.C. 1995). As the PTO Commissioner has no power to promulgate substantive rules, the Commissioner receives no deference in his interpretation of the statutes and laws that give rise to the instant requirement. *Merck & Co., Inc. v. Kessler*, 80 F.3d 1543 (Fed. Cir. 1996), citing, *Chevron v. Natural Resources Defense Council*, 467 U.S. 837 (1984). When agency rules either (a) depart from existing

¹Accord Hoechst Aktiengesellschaft v. Quigg, 917 F.2d 522, 526, 16 USPQ2d 1549, 1552 (Fed. Cir. 1990); Glaxo Operations UK Ltd. v. Quigg, 894 F.2d 392, 398-99, 13 USPQ2d 1628, 1632-33 (Fed. Cir. 1990); Ethicon Inc. v. Quigg, 849 F.2d 1422, 1425, 7 USPQ2d 1152, 1154 (Fed. Cir. 1988).

practice or (b) impact the substantive rights and interests of the effected party, the rule must be considered substantive. *Nat'l Ass'n of Home Health Agencies v. Scheiker*, 690 F.2d 932, 949 (D.C. Cir. 1982), cert. denied, 459 U.S. 1205 (1983).

a. **The PTO Requirement is Substantive Because it Radically Changes Long Existing Patent Practice by Creating a New Requirement Upon Applicants Outside the Scope of 37 C.F.R. § 1.78 (b)**

The Examiner's requirement is totally distinguishable from the well articulated requirement authorized by 37 CFR § 1.78 (b), because it (1) creates and imposes a new requirement to avoid abandonment of the application based on the allegation that conflicts exist between claims of the related 328 co-pending applications, and (2) it results in an effective final double patenting rejection without the PTO's affirmative double patenting rejection of the claims. Long existing patent practice recognizes only two types of double patenting, double patenting based on 35 U.S.C. § 101 (statutory double patenting) and double patenting analogous to 35 U.S.C. § 103 (the well-known obviousness type double patenting).² These two well established types of double patenting use an objective standard to determine when they are appropriate³ and have a determinable result on the allowability of the pending claims.

The Examiner's new requirement represents a radical departure from long existing patent practice relevant to conflicting claims between co-pending applications

²MPEP § 804(B)(1) states, in an admittedly awkward fashion, that the inquiry for obviousness type double patenting is analogous to a rejection under 35 U.S.C. 103: "since the analysis employed in an obvious-type double patenting determination parallels the guidelines for a 35 U.S.C. 103 rejection, the factual inquires set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103 are employed when making an obvious-type double patenting analysis".

³ The objective test for same invention double patenting is whether one of the claims being compared could be literally infringed without literally infringing the other. The objective test for obviousness type double patenting is the same as the objective nonobviousness requirement of patentability with the difference that the disclosure of the first patent may not be used as prior art.

of the same inventive entity. Two well established double patenting standards are based on an objective analysis of comparing pending and *allowed* claims. However, in the present application, there are no *allowed* claims. The Examiner's new requirement to avoid a double patenting rejection presumes that conflicts exist between claims in the present application and claims in the 327 copending applications. This presumption of conflicts between claims represents a radical departure from long existing patent practice as defined by 37 C.F.R. § 1.78 (b), which states:

Where two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application.

Clearly, the only requirement authorized by the rule is the elimination of conflicting claims from all but one application where conflicting claims have been determined to exist. Furthermore, in order to determine that conflicting claims do in fact exist in multiple applications, the only possible analysis is obviousness-type double patenting, since there are no allowed or issued claims by which to employ the 35 U.S.C. § 101 statutory double patenting analysis. Once obviousness-type double patenting analysis has been applied and conflicting claims have been determined to exist, only a *provisional* obviousness-type double patenting rejection is possible until claims from one application are allowed.

In summary, the Examiner's new requirement departs from long-established practice because it (1) creates and imposes a new requirement to avoid abandonment of the application based on the allegation that conflicts exist between claims of the related 328 co-pending applications, and (2) it results in an effective final double patenting rejection without the PTO's affirmative double patenting rejection of the claims.

Therefore, the Examiner's new requirement departs from existing practice and therefore is a substantive rule beyond the authority of the PTO and is therefore, invalid.

b. The New Requirement is Also a Substantive Rule Because it Adversely Impacts the Rights and Interests of Applicants to Benefits of the Patent

The rights and benefits of a U.S. patent is solely a statutory right. *Merck & Co., Inc. v. Kessler*, 80 F.3d 1543 (Fed. Cir. 1996). The essential statutory right in a patent is the right to exclude others from making, using and selling the claimed invention during the term of the patent. Courts have recognized that sometimes new procedural rules of the PTO are actually substantive rules, e.g. when the new rule made a substantive difference in the ability of the applicant to claim his discovery. *Fressola v. Manbeck*, 36 USPQ2d 1211, 1214 (D.D.C. 1995) (emphasis added), citing, *In re Pilkington*, 411 F.2d 1345, 1349; 162 USPQ 145 (CCPA 1969); and *In re Steppan*, 394 F.2d 1013, 1019; 156 USPQ 143 (CCPA 1967).

The new requirement, on its face and as applied here, is an instance of a PTO rule making a substantive difference in Applicants' ability to claim their invention and, therefore, must be considered a substantive rule. The requirement denies Applicants rights and benefits expressly conferred by the patent statute. The measure of the value of these denied rights and benefits is that the requirement, as applied here, would deny Applicants the full and complete PTO examination of Applicants' claims on their merits, as specified by 37 C.F.R. § 1.105. In addition, to file terminal disclaimers in each of the related 328 applications terminally disclaiming each of the other 327 applications based on the PTO's incomplete examination on the merits would deny Applicants the benefit of the full patent term of 17 years on each of Applicants' respective applications. Applicants respectfully submit that the requirement has a huge impact on their rights and interests in the presently claimed invention.

c. Conclusion: Substantive Rule

In summary, the requirement is a change to long existing practice and/or has a substantive impact on the rights and interests of Applicants to their invention. Either

finding means that the new requirement is a substantive rule. Since the Commissioner has no power to issue substantive rules, the requirement is an improperly promulgated substantive rule having no force of law.

3. The PTO Requirement is Outside the Scope of 37 C.F.R. § 1.78 (b)

Rule 78 (b) states that:

Where two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application.

The only requirement that Rule 78 (b) authorizes is the elimination of conflicting claims from all but one co-pending applications.

In the instant Office Action, Examiner has not required the elimination of all conflicting claims from all but one application, but instead has required Applicants to:

1) file terminal disclaimers in each of the related 328 applications; 2) provide an affidavit; or 3) resolve all conflicts between claims in the related 328 applications. None of the options in the requirement is authorized by Rule 78 (b), and therefore Applicants respectfully submit that such a requirement is improper.

With respect to the PTO's authority to act within Rule 78 (b) regarding the rejection of conflicting claims, MPEP § 822.01 states that:

Under 37 CFR § 1.78 (b), the practice relative to overlapping claims in applications copending before the examiner..., is as follows: Where claims in one application are unpatentable over claims of another application of the same inventive entity because they recite the same invention, *a complete examination should be made of the claims of each application* and all appropriate rejections should be entered in each application, including rejections based upon prior art. *The claims of each application may also be rejected on the grounds of provisional double patenting on the claims of the other application* whether or not any claims avoid the prior art. Where appropriate, the same prior art may be relied upon in each of the applications. MPEP 822.01 (6th Ed., Rev. 3, 1997), (*emphasis added*).

In light of the requirement of the Office Action, MPEP § 822.01 and 37 CFR § 1.78 (b) are not applicable since there has not been any rejection with regard to the elimination of conflicting claims from all but one co-pending application.

4. The Assertion That Failure to Comply with the Requirement Will Result in Abandonment of Applicants' Application is Improper

Applicants' prospective failure to comply with the above requirements cannot properly result in abandonment of the present application. Applicants respectfully submit that abandonment of an application can properly occur only:

- (1) for failure to respond within a provided time period (under Rule 135);
- (2) as an express abandonment (under Rule 138); or
- (3) the result of failing to timely pay the issue fee (under Rule 316).

There is no provision in the rules permitting abandonment for failure to comply with any of the presented requirements. To impose an improper requirement upon Applicants and then hold the application is to be abandoned for failure to comply with the improper requirement violates the rules of practice before the USPTO. Furthermore, Examiner is in effect attempting to create a substantive rule which is above and beyond the rulemaking authority of the USPTO, and therefore is invalid.

In the *Application of Mott*, 539 F.2d 1291, 190 USPQ 536 (CCPA 1976), the applicant had conflicting claims in multiple applications. The CCPA held that action by the Examiner which would result in automatic abandonment of the application was legally untenable. *Id.* at 1296, 190 USPQ at 541. In the present application, Examiner has asserted that there are conflicting claims in multiple applications, and that non-compliance of the Office Action's requirement will result in an automatic abandonment. Therefore, under *Mott's* analysis, the Office Action's result of abandonment of Applicants' application is legally untenable.

5. Response to Apparent Conflict of Claims

Applicants submit that the presentation of the Office Action Appendix fails to demonstrate any conflicts between claims of the present application and claims of the co-pending applications. Rather, the Office Action Appendix compares representative claims of *other* applications in attempt to establish that "conflicting claims exist between the 328 related co-pending applications." Absent any evidence of conflicting claims between the Applicants' present application and any other of Applicants' co-pending applications, any requirement imposed upon Applicants to resolve such alleged conflicts is improper.

6. Request for Withdrawal of Requirement

Therefore, Applicants respectfully request that Examiner reconsider and withdraw the requirement that Applicants: (1) file terminal disclaimers in each of the related 328 applications terminally disclaiming each of the other 327 applications; (2) provide an affidavit attesting to the fact that all claims in the 328 applications have been reviewed by applicant and that no conflicting claims exist between the applications; or (3) resolve all conflicts between claims in the above identified 328 applications by identifying how all the claims in the instant application are distinct and separate inventions from all the claims in the above identified 328 applications, which upon failing to do so will abandon the application.

7. Filing of Supplemental Oath

Notwithstanding the foregoing, Applicants will file a supplemental oath under 37 C.F.R. § 1.67 for each application when Examiner identifies allowable subject matter. Applicants respectfully propose that the filing of individual supplemental oaths attesting to the absence of claim conflicts between previously patented claims and subsequently allowed claims is a more reasonable method of ensuring the patentable distinctness of subsequently allowed claims.

Under 37 C.F.R. § 1.105, § 1.106 & § 1.78 (b), Examiner has the duty to make every applicable rejection, including double patenting rejection. Failure to make every proper rejection denies Applicants all rights and benefits related thereto, e.g., Applicants' right to appeal, etc. Once obviousness-type double patenting analysis has been applied and conflicting claims have been determined to exist, only a *provisional* obviousness-type double patenting rejection is possible until claims from one application are allowed.

D. Information Disclosure Statement

The Applicants appreciate the Examiner's review of the Information Disclosure Statements filed 3/19/96, 9/6/95 and 4/5/96 and have addressed those specific concerns raised in paragraph 7 of the Office Action. It is the Applicants' understanding that the Examiner raised the following issues:

- (1) the reasons for such a large number of references cited,
- (2) foreign language references cited without a statement of relevance or translation have not been considered,

1. Reason for Citation of Large Number of References

The reason that the Applicants submitted such a large number of references in the Information Disclosure Statements was that a large portion of the information cited by the Applicants was brought to the Applicants' attention in the discovery processes in a previous litigation in the United States District Court for the Eastern District of Virginia (*Personalized Mass Media Corp. v. The Weather Channel, Inc.* Docket No. 2:95 cv 242) and an investigation by the International Trade Commission (*In the Matter of Certain Digital Satellite System (DSS) Receivers And Components Thereof*, No. 337 TA 392, which was direct to U.S. Pat. No. 5,335,277) regarding claims in the Applicants' related issued patents. The documents listed in the Information Disclosure Statement were cited during the previous litigation/investigative proceedings by the alleged infringers

in the aforementioned proceedings as being relevant and material to patentability of the claims in the related patents. The Applicants submitted those materials in the Information Disclosure Statement to the PTO at the earliest possible time in order to file them in compliance with the 3 month requirement stated in the certification used to submit the Information Disclosure Statement before the Office Action was issued as is necessary under 37 CFR § 1.97 (c) (1). In such haste, entries were inadvertently submitted which do not appear on their face to be material to the patentability of the present application. Applicants have corrected this error with the submission of the corrected Information Disclosure Statement as shown in Appendix B. However, it is the Applicants' understanding that not all references cited must be material to patentability in order for such references to be considered. In § 609 of the MPEP, it states,

"[t]hese individuals also may want the Office to consider information for a variety of reasons: e.g., without first determining whether the information meets any particular standard of materiality, or because another patent office considered the information to be relevant in a counterpart or related patent application filed in another country, or to make sure that the examiner has an opportunity to consider the same information that was considered by the individuals that were substantially involved in the preparation or prosecution of a patent application."

Applicants' position is that information that was considered material in previous litigation would fall into the 'variety of reasons' category as stated above. Applicants' intention was not to confuse or make difficult the examination process for the Examiner, but was instead to be forthright and open in disclosing all information deemed to be relevant to the application in issue by third parties.

2. Citations of Foreign Language References

Applicants have re-examined the foreign references listed in all of the Information Disclosure Statements and have either eliminated such references from the list, included translations herewith or provided statements as to the relevancy of such references (APPENDIX A). The inclusion of translations with this response is in

compliance with 37 C.F.R. § 1.97 (f) which states in part, “[I]f a bona fide attempt is made to comply with 37 C.F.R. § 1.98, but part of the required content is inadvertently omitted, additional time may be given to enable full compliance.” The omission of any translations and/or relevancy statements for foreign references were inadvertent and unintentional and are herein submitted in accordance with 37 C.F.R. § 1.97 (f).

3. Supplemental Information Disclosure Statement

The Applicants offer the Information Disclosure Statement (APPENDIX B) in addition to the previously filed Information Disclosure Statements. It is the Applicants' intention that such Information Disclosure Statement will help clarify any issues previously raised by the Examiner and aid in the prosecution of the present patent application.

E. Interviews

As to the grouping of paragraphs numbered 16, applicants acknowledge and appreciate the interviews provided by the PTO. Applicants also appreciate the detailed description of the interviews provided in the Office Action.

F. Response to Rejections under 35 U.S.C. § 112

1. Consistent Use of Terminology

The Office Action suggests that Applicants “review the pending claims of the present application to at least ensure that the definition of all terminology being used in the pending claims is consistent with the priority being claimed and is proper in the context in which it is being recited.” Specifically, the Office Action objects to the Applicants’ use of the term “programming”.

The Office Action suggests that, in the Parent Application, the Applicants defined the term “programming” as “everything transmitted over television or radio intended for communication of entertainment or to instruct or inform”. The Office Action uses the definition of programming set forth in the abstract of the disclosure.

"The purpose of the Abstract is to enable the Patent and Trademark Office and the public generally to determine quickly from a cursory inspection the nature and gist of the technical disclosure. The abstract shall not be used for interpreting the scope of the claims." 37 C.F.R. § 1.72(b). By properly making reference to the whole specification, the Examiner will get a more complete understanding of Applicants' meaning of the term "programming". "It is the object of this invention to unlock [the potential for a significant increase in the scope and scale of multi-media and multi-channel presentations] by the development of means and methods which permit progra[m]ming to communicate with equipment that is external to television and radio receivers, particularly computers and computer peripherals such as printers."

"It is the further purpose of this invention to provide means and methods to process and monitor such transmissions and presentations at individual receiver sites and to control, in certain ways, the use of transmitted progra[m]ming and the operation of certain associated equipment. Such receiver sites may be stations or systems that intend to retransmit the progra[m]ming, or they may be end users of the progra[m]ming. The present invention contemplates that certain data may be encrypted and that certain data collected from such processing and monitoring will automatically be transfer[r]ed to a remote geographic location or locations." U.S. Patent No. 4,694,490, col. 1, lines 22-24, 36-53. Applicants contend that the definition of "programming", to include television and radio entertainment information, computer programming and data to control execution of a processor, in the present application is clearly supported by the definition of the term "programming" in the Parent Application.

Applicants assert that their use of the term "programming" in the present application is both consistent with normal/usual usage and with the parent application. The "Webster's Seventh New Collegiate Dictionary" (copyrighted 1977 by G. & C. Merriam Co., Springfield, Mass.) gives separate definitions for the noun and verb forms

of "programming". The noun form of "programming" is defined with a series of gerunds:

"programming or programing ... n : the planning, scheduling, or performing of a program."

And the noun form of "program", which includes the word "programming" in its definition, is:

"program or programme ... n ... 1 ... : a public notice 2 a : a brief usu. printed outline of the order to be followed, of the feature or features to be presented, and the persons participating (as in a public exercise, performance, or entertainment) b : the performance of a program; esp : a performance broadcast on radio or television 3 : a plan or system under which action may be taken toward a goal 4 : CURRICULUM 5 : PROSPECTUS, SYLLABUS 6 a : a plan for the programming of a mechanism (as a computer) b : a sequence of coded instructions that can be inserted into a mechanism (as a computer) or that is part of an organism 7 : matter for programmed instruction"

The verb form of "programming" is defined with the verb form of "program" and is:

"program also programme vt -grammed or -gramed; -gramming or -graming 1 a : to arrange or furnish a program of or for : BILL b : to enter in a program 2 : to work out a sequence of operations to be performed by (a mechanism) : provide with a program 3 : to insert a program for (a particular action) into or as if into a mechanism"

Applicants assert that these definitions are entirely consistent with Applicants' present and parent application. For example, the parent application discloses a well known television program, "Wall Street Week", at U.S. Patent No. 4,694,490 (hereinafter '490) col. 19 line 5 through col. 20 line 7. At '490 col. 19 lines 48-53 and col. 19 line 63 through col. 20 line 7, Applicants disclose a sequence of operations performed by a mechanism (a computer) which includes a first output (col. 19 line 65 through col. 20 line 2) and a second output (col. 20 line 6). This sequence of operations is performed in response to "several instruction signals" (col. 19 line 46) followed by "an instruction signal" (col. 19 line 60). (That Applicants' "signals" are coded is disclosed at '490 col. 11

lines 12-14 where a code reader passes the signals to a computer.) Applicants assert that these disclosed instruction signals (col. 19 lines 48-53 and 60-67) clearly meet the dictionary definition of a program--"a sequence of coded instructions that can be inserted into a mechanism (as a computer)"--and are, in fact, what is now, and was in 1981, widely known among those of considerably less than ordinary skill in the art as "a computer program" and as "computer programming".

Applicants also assert that the first output (col. 19 line 65 through col. 20 line 2) and a second output (col. 20 line 6), *by themselves*, also meet the dictionary definition of a program--"the performance of a program". Furthermore, Applicants contend that they constitute both computer programming *and television programming*. Being generated and outputted by a computer qualifies them as computer programming. Being displayed as an integral part of a television program--"Wall Street Week" (col. 19 lines 45, 54-60, and col. 19 line 67 through col. 20 line 2)--qualifies them as television programming.

Finally, Applicants assert that this disclosure is in no way inconsistent with the meaning given to "programing" in the Abstract of Applicants' parent disclosure--"everything transmitted over television or radio intended for communication of entertainment or to instruct or inform." Applicants clearly disclose that the signals are "instruction signals embedded in the 'Wall Street Week' programing transmission" (col. 19 lines 43-44) and that "These signals instruct" (col. 19 line 48) and "This signal instructs" (col. 19 lines 64-65).

For the reasons set forth above, Applicants assert that the term "programming" as used throughout the instant application to include what are commonly known as television, radio and computer programming is clearly and unambiguously supported by the specification as filed and withdrawal of the corresponding rejection is respectfully requested.

The Office Action additionally objects to Applicants' use of the term "data units". The Office Action refers to "less precise" and "more precise" teachings of Applicants' original disclosure. Applicants' contend that what the Office Action refers to as "less precise" teachings (the last line on page 35; lines 17-20 on page 71; and lines 7-9 on page 72) is simply a disclosure of the general field of that which is encompassed in the "more precise" teachings (lines 17-20 on page 72). In the tables below, Applicants contend that adequate support for the term "data units" is set forth.

2. Specification Support of Claims 1-50

Paragraph 9 of the Office Action rejects claims 1-50 under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The Office Action specified language of claims 1-50 as not being supported by the specification as originally filed.

The following tables list Applicants' claim language in the left column which corresponds to the specification support in the right column.

a. Claim 1

data units	For example, col. 18, lines 50-54 and col. 15, line 59.
an information portion	For example, col. 18, line 53 including "each news transmission".
an identification portion	For example, col. 18, lines 53-54 including "signal...that identifies"
data units on a multiple channel data stream	For example, col. 18, lines 50-68. For example, col. 12, lines 60-61 or col. 19, lines 35-37

b. Claim 3

schedule information	For example, col. 11, lines 39 and 22-31.
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c. **Claim 4**

reordering the distribution order of the received data units	For example, col. 12, lines 1-4 with col. 12, line 61.
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d. **Claim 5**

said data units separated in the time domain so that said data units are sequentially received by a switch	For example, col. 11, lines 34-37 and col. 12, lines 60-61. For example, col. 18, lines 53-55 and, for example, col. 19, lines 35-37.
decoding the identification portion of each of said data units to identify the priority of the information content portion	For example, col. 11, lines 3-14 and 38-43 with col. 9, line 54 in lines 47-57 and col. 12, lines 59-65.
communicating said data units to said selected storage location to prioritize the transmission of said data units	For example, col. 11, lines 62-64 with lines 58-60.

e. **Claim 7**

generating a bill from	For example, col. 3, line 68 through col. 4 line 2 and col. 20, lines 57-58.
said total number of data units transmitted over a predetermined time	For example, col. 20, line 56 with col. 17, lines 6-9
calculated in said step of accumulating information by comparing said accumulated total number of data units transmitted	For example, col. 16, lines 61-66.

f. **Claim 10**

said calculated total about	For example, col. 18, lines 39-41.
said identification portion of said data units being maintained for each data port on said switch	For example, col. 15, lines 58-60, including "each...data unit received and the source of each". For example, col. 10, lines 42 and 44-46 with col. 15,

line 61.

g. Claim 12

comparing the identification portion of said data units to predetermined timing data to determine a transmission time	For example, col. 11, lines 38-43 with col. 12, lines 60-61 and col. 15, line 59
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h. Claim 17

comparing said decoded identification portion of each of said data units to predetermined priority data to determine a transmission priority	For example, col. 11, lines 38-43 with col. 11, lines 3-14, col. 9, lines 47-57, col. 12, lines 60-61, and col. 15, line 59.
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i. Claim 24

a second multimedia information portion	For example, col. 3, lines 56-60 and col. 19, lines 31-37.
transmitting said data units based on said assigned priority determined by the type of data in said second multimedia information portion	For example, col. 11, lines 50-57 For example, col. 11, lines 22-25 For example, col. 12, lines 60-61

j. Claim 30

to identify an address that indicated routing information for said data units	For example, col. 17, lines 39-44
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k. Claim 31

receiving a new transmission schedule and changing said predetermined transmission schedule	For example, col. 11, lines 39-41.
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I. Claim 33

a network of switches	For example, col. 10, line 42.
said asynchronous time determined by decoding said first encoded portion	For example, col. 11, lines 38-46 with col. 11, lines 3-14 and col. 9, line 54 in col. 9, lines 47-57.

m. Claim 38

so that said multimedia data units have an asynchronous arrival at a data port on said switch	For example, col. 19, lines 31-37 with col. 15, line 59, col. 18, lines 49-52 and col. 11, lines 34-37.
re-timing said re-formatted multimedia data units into a synchronous data stream	For example, col. 11, lines 57-65, col. 11, lines 41-46, col. 10, lines 49-52 and col. 12, lines 41-47.

3. Rejections Under 35 U.S.C. §112, Second Paragraph

Claims 1-50 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention.

The Office Action suggests that "applicant's use of the "data units" terminology throughout the pending claims is inconsistent with, and repugnant to, applicant's [sic] use of the "data" terminology in his own written description." Applicants contend that the specification support provided sufficiently sets forth support for Applicants' use of the terminology in the claims. Applicants contend that the use of the terminology is consistent throughout the specification and the claims.

Regarding claim 4, line 3, Applicants have amended the claim to provide proper antecedent basis. The antecedent basis is from claim 1, line 12.

Regarding claim 4, line 5, Applicants have amended the claim to correct the antecedent basis problem.

Regarding claim 5, line 11, Applicants have amended the claim so that the use of the term "switch" is consistent throughout the claim.

Regarding claim 5, line 12, Applicants have amended the claim so that the use of the term "data units" is consistent throughout the claim.

Regarding claim 6, and related claims, Applicants have amended the claims so that the use of the term "each unique destination address" is consistent throughout the claims.

Regarding claim 33, Applicants have amended the claim to correct the antecedent basis problems.

Regarding claim 34, Applicants have corrected the antecedent basis problem.

Regarding claim 38, Applicants contend that the methods recited in the claim comprise the methods necessary to perform that which is recited in the preamble.

Applicants have amended the claim to correct the antecedent basis problem.

4. Conclusion

Applicants respectfully submit that claims 10-11, 22-23, 31, 35-37, 43, and 45-50 and amended claims 1-9, 12-21, 24-30, 32-34, 38-42 and 44 the subject application particularly point out and claim the subject matter sufficiently for one of ordinary skill in the art to comprehend the bounds of the claimed invention. The test for definiteness of a claim is whether one skilled in the art would understand the bounds of the patent claim when read in light of the specification, and if the claims so read reasonably apprise those skilled in the art of the scope of the invention, no more is required. *Credle v. Bond*, 25 F.3d 1556, 30 USPQ2d 1911 (Fed. Cir. 1994). The legal standard for definiteness is whether a claim reasonably apprises those of skill in the art of its scope.

In re Warmerdam, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994). Applicants have amended the claims to enhance clarity and respectfully submit that all pending claims are fully enabled by the specification and distinctly indicate the metes and bounds of the claimed subject matter.

Applicants believe that the above recited changes are sufficient to overcome the rejections under 35 U.S.C. 112, first and second paragraph, and respectfully request withdrawal of these rejections. Applicants provide these specific embodiments in support of the pending claims by way of example only. The claims must be read as broadly as is reasonable in light of the specification, and Applicants in no way intend that their submission of excerpts/examples be construed to unnecessarily restrict the scope of the claimed subject matter.

G. Response to Rejection of Claims for Absence of Novelty

1. 35 U.S.C. § 102 (b) Rejection over Huang, U.S. Patent No. 4,472,801

Claims 1, 2, 4, 5, 17 and 24 are rejected under 35 U.S.C. § 102 (b) as being anticipated by Huang, U.S. Patent No. 4,472,801.

Applicants submit that the applied reference, Huang, is unavailable as prior art under 35 U.S.C. § 103(a). In this instance, the U.S. filing date of Huang is **March 28, 1983**, subsequent to the asserted priority date of the present application, **November 3, 1981**. Applicants respectfully request the rejection of claims 1, 2, 4, 5, 17 and 24 are rejected under 35 U.S.C. § 102 (b) over Huang be withdrawn and the claims be permitted to issue.

2. 35 U.S.C. § 102 (b) Rejection over Sanders, Jr. et al., U.S. Patent No. 4,135,156

Claims 1, 4, 5 and 8 are rejected under 35 U.S.C. § 102 (b) as being anticipated by Sanders, Jr. et al., U.S. Patent No. 4,135,156.

a. Independent Claim 1

With respect to Applicants' claim 1, the reference fails to teach, *inter alia*, the Applicants' claim limitation of decoding the identification portion of the data units to identify the at least one characteristic of the data units. There is no suggestion in Sanders, Jr. et al. of decoding any part of the identification portion of the data units for any reason. Sanders, Jr. et al. merely discloses that the information block of the incoming message packets is stored in a queue directory 75. The Office Action suggests that the queue directory 75 decodes the information block. There is nothing in the specification to support such a conclusion. There is nothing which suggests that the queue directory is any more than a storage device.

Since Sanders, Jr. et al. fails to teach Applicants' step of decoding, it follows that Sanders, Jr. et al. fails to teach the Applicants' claim limitations of (c) determining whether the data units should be distributed before or after one or more other of said data units based on the identified characteristic of the data units; and (d) transmitting the data units in an order relative to other of said data units based on said step of determining.

Applicants respectfully submit that the cited art does not anticipate claim 1 since the reference fails to disclose every element of the claimed invention, and Applicants respectfully request that the 35 U.S.C. § 102 (b) rejection of claim 1 be withdrawn.

b. Independent Claim 5

With respect to Applicants' claim 5, the reference fails to teach, *inter alia*, the Applicants' claim limitation of A method for routing and distributing data units, each of said data units having an identification portion and an information content portion, said method using a switch with multiple data ports, a plurality of storage locations for storing and communicating each of said data units to a unique destination address and a controller for controlling said switch and said storage location. There is no suggestion in Sanders, Jr. et al. of a switch with multiple data ports as presently claimed.

Furthermore, there is no concept of a controller which controls a switch or a storage location.

Sanders, Jr. et al. fails to teach, *inter alia*, the Applicants' claim limitation of receiving the data units in an information stream, said stream having said data units separated in the time domain so that said data units are sequentially received by said switch. There is no suggestion of data units separated in the time domain in Sanders, Jr. et al. In fact, there is no mention of time related to the data units in any manner.

Sanders, Jr. et al. fails to teach, *inter alia*, the Applicants' claim limitation of processing said data units by decoding the identification portion of each of said data units to identify the priority of the information content portion of each of said data units. There is no suggestion in Sanders, Jr. et al. of decoding any part of the identification portion of the data unit for any reason. Sanders, Jr. et al. merely discloses that the information block of the incoming message packets is stored in a queue directory 75. The Office Action suggests that the queue directory 75 decodes the information block. There is nothing in the specification to support such a conclusion. There is nothing which suggests that the queue directory is any more than a storage device.

Sanders, Jr. et al. fails to teach, *inter alia*, the Applicants' claim limitation of routing each of said data units to a data port on said switch. There is no suggestion in Sanders, Jr. et al. of routing any of the data units to a data port. There is certainly no suggestion of a switch as presently claimed. The Office Action suggests that Sanders, Jr. et al. teaches a "switch" comprised of components 63 and 69 of Fig. 5. Block 63 in Fig. 5 is labeled "Input Data Multiplexing" and block 69 is labeled "Output Data Control". There is no suggestion in the specification that either of these blocks is equivalent to a switch as presently claimed. There is certainly no suggestion that either of the elements is a switch with multiple data ports as claimed.

Sanders, Jr. et al. fails to teach, *inter alia*, the Applicants' claim limitation of communicating each of said data units to said selected storage location to prioritize the transmission of each of said data units. There is no suggestion that the data packets in Sanders are communicated to a storage location to prioritize the transmission thereof. Instead, Sanders, Jr. et al. teaches the prioritization of the data packets, followed by transmission to a storage location.

Applicants respectfully submit that the cited art does not anticipate claim 5 since the reference fails to disclose every element of the claimed invention, and Applicants respectfully request that the 35 U.S.C. § 102 (b) rejection of claim 5 be withdrawn.

c. Dependent Claims 4 and 8

Claim 4 depends upon independent claim 1. Claim 8 depends upon independent claim 5. As discussed *supra*, Sanders, Jr. et al. fails to disclose every element of independent claims 1 and 5 and thus, *ipso facto*, Sanders, Jr. et al. fails to anticipate dependent claims 4 and 8, and therefore, this rejection should be withdrawn and the claims be permitted to issue.

3. Conclusion

Applicants further respectfully submit that claims 1, 2, 4, 5, 8, 17, and 24 in the present application should be allowed because these methods are not disclosed, taught, suggested, or implied by the applied prior art. For a prior art reference to anticipate in terms of 35 U.S.C. § 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). There must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. *Scripps Clinic & Research Foundation v. Genetech, Inc.*, 927 F.2d 1565, 18 USPQ2d 1001, 18 USPQ2d 1896 (Fed. Cir. 1991). Absence from a cited reference of any element of a claim

negates anticipation of that claim by the reference. *Kloster Speedsteel AB v Crucible, Inc.*, 230 USPQ 81 (Fed. Cir. 1986), *on rehearing*, 231 USPQ 160 (Fed. Cir. 1986).

H. Response to Obviousness Rejection of Claims

To establish a *prima facie* case of obviousness, three basic criteria must be met.

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference to combine the teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references combined) must teach or suggest all the claim recitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not based on Applicants' disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

MPEP 706.02(j).

1. **35 U.S.C. § 103 (a) Rejection over Cox et al., U.S. Patent No. 4,388,645 in view of Robertson et al., U.S. Patent No. 4,052,737.**

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cox et al., U.S. Patent No. 4,388,645 in view of Robertson et al., U.S. Patent No. 4,052,737.

With respect to Applicants' claim 12, Cox et al. in view of Robertson et al. fails to, *inter alia*, teach or suggest all the claim recitations, i.e., A method for routing and distributing data units, each data units having an identification portion and an information content portion, said method using a switch with multiple data ports, a plurality of storage locations for storing and communicating data units and a controller for controlling said switch and said storage location. There is no suggestion of a switch in Cox et al. There is certainly no suggestion of a switch with multiple data ports as presently claimed.

Cox et al., either alone or in combination, fails to teach, *inter alia*, the Applicants' claim limitation of receiving the data units in an information stream, said stream having

said data units separated in the time domain so that said data units are sequentially received by a switch. Applicants contend that there is no switch taught in Cox et al. There is certainly no suggestion of a switch with multiple data ports as presently claimed.

The Office Action states that Applicants' "claim 12 recites a "switch" while Cox et al. only illustrated a "means" which operated to perform a switching function." The Office Action suggests that it would have been obvious to modify the teachings of Cox et al. with Robertson et al. The Office Action equates Robertson et al.'s interface logic 42 with Applicants' switch. There is no suggestion that interface logic 42 is a switch with multiple data ports as presently claimed. There is further no suggestion that the interface logic performs any switching function whatsoever. The interface logic 42 simply transfers incoming data to one of several locations and is akin to a pass through device.

Cox et al., either alone or in combination, fails to teach, *inter alia*, the Applicants' claim limitation of processing said data units by decoding the identification portion of each of said data units to identify the information content portion of said data units. There is no suggestion in Cox et al. of decoding the identification portion of each of said data units. There is certainly no such decoding taught in order to identify the information content portion of said data units. Neither the Office Action nor the specification of Cox et al. provides support for such a conclusion.

Cox et al., either alone or in combination, fails to teach, *inter alia*, the Applicants' claim limitation of comparing the identification portion of said data units to predetermined timing data to determine a transmission time based on said identification portion of said data units. There is no suggestion that such a comparison takes place to determine a transmission time. There is certainly no suggestion of such a determination based on said identification portion of said data units.

Since Cox et al., either alone or in combination, fails to teach, *inter alia*, the Applicants' comparing step, it follows that Cox et al. fails to teach transmitting said data units based on said comparing step.

Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claim 12 be withdrawn.

III. CONCLUSION

In accordance with the foregoing it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. Further, all pending claims are patentably distinguishable over the prior art of record, taken in any proper combination. Thus, there being no further outstanding objections or rejections, the application is submitted as being in a condition for allowance, which action is earnestly solicited.

If the Examiner has any remaining informalities to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such informalities.

Respectfully submitted,



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